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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,953	09/22/2006	Yaser S. Abdelsamed	11059-0006US	5430

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EXAMINER

GRAMLING, SEAN P

ART UNIT	PAPER NUMBER
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2875

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,953	Applicant(s) ABDELSAMED, YASER S.	
	Examiner SEAN P. GRAMLING	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/22/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. **Claims 1 and 11** are objected to because of the following informalities:
2. In claim 1, line 5, Applicant recites that the transition zone is “significantly shorter” than the length of the main prism. This is an indefinite limitation. Appropriate correction is required.
3. In claim 11, lines 7-8, Applicant recites that the length of the transition zone is "substantially less" than the length of the second set of linear prisms. This is an indefinite limitation. Moreover, there is insufficient antecedent basis for "said second set of linear prisms" in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-4, 7-9 and 11** are rejected under 35 U.S.C. 102(e) as being anticipated by *Leadford* (US 2004/0218392).
6. Regarding claim 1, Leadford discloses a reflector for a luminaire comprising a shaped wall 18 having a plurality of longitudinal main reflecting prisms 34 and a plurality

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of transition reflecting prisms 36 interleaved with the main reflecting prisms wherein the peak of each transition prism transitions into the valley of a respective main prism in a transition zone that is significantly shorter than the length of the main prism (see Figures 1, 3 and 6-7 and paragraphs [0048]-[0051]).

7. Regarding claim 2, the main reflecting prisms 34 and the transition prisms 36 in Leadford are configured to provide internal reflection of light emanating from an interior portion of the luminaire.

8. Regarding claim 3, the shapes of the transition reflecting prisms 36 in Leadford are essentially the same as the shapes of the main reflecting members 34 (see Figure 7).

9. Regarding claim 4, the shaped wall 18 in Leadford is rotationally symmetric about a longitudinal axis of the luminaire (see Figure 1).

10. Regarding claim 7, the transition zone in Leadford comprises a step (see Figure 7 and the different heights of prisms 34 and 36).

11. Regarding claim 8, a cross section passing through a longitudinal axis of the shaped wall 18 in Leadford, the shape of the transition zone is one of linear, parabolic, or stepped (see Figures 1 and 6-8).

12. Regarding claim 9, a cross section passing through a longitudinal axis of the shaped wall 18 in Leadford, the shape of the transition zone is circular (see Figures 1 and 6-8).

13. Regarding claim 11, Leadford discloses a method of making reflector 10 comprising the steps of providing a shaped wall 18, forming in the shaped wall a first set

of main prisms 34 extending along substantially the entire length of the mold, forming in the shape wall 18 a set of transition prisms 36 similar in shape to the main prisms and interleaved with the main prisms, the transition prisms extending along less than the length of the shaped wall 18 and forming in the shaped wall a transition zone contiguous with the transition prisms, the length of the transition zone being substantially less than the length of the main prisms (see Figures 1, 3 and 6-7 and paragraphs [0048]-[0051]).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 5-6 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Leadford* (US 2004/0218392).

16. Regarding claims 5-6 and 10, Leadford does not specify that the length of the transition zone be less than about 10 or 5 percent of the length of the shaped wall 18 or that the radius of curvature of the transition zone be about three inches. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to specify the ranges of length and curvature of the transition zone since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re*

Aller, 105 USPQ 233), and since such a modification would involve a mere change in size of a component which has been held to within the level of ordinary skill in the art (*In re Rose*, 105 USPq 237).

17. **Claims 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Leadford* (US 2004/0218392) and further in view of *Sales* (US 2004/0141324).

18. Regarding claim 12, *Leadford* does not specify that the main prisms 34 and the transition prisms 36 be formed in the shaped wall 18 and then formed into the shape of the reflector by the use of a mold. However, the use of molds to form reflectors is well-known in the art and is specifically disclosed in *Sales* (see *Sales*, Figures 13A-13D, and paragraphs [0069]-[0072]). It would have been obvious to one of ordinary skill at the time of the invention to form the reflector 10 in *Leadford* through the use of a mold as taught by *Sales* in order to allow for convenient formation of the reflector and easy formation of different prism patterns (see *Sales*, paragraph [0069]).

19. Regarding claim 13, *Leadford* also does not specify that the prisms 34 and 36 in the shaped wall 18 be formed using a single cutting tool or multiple cutting tools of similar shape. However, the use of cutting tools to form prism in reflectors is well known in the art and is specifically disclosed in *Sales* (see paragraphs [0070]-[0072]). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a cutting tool to form the prisms 34 and 36 in the shaped wall in *Leadford* in order to precisely form the peaks and valleys to achieve the desired refractive effect.

20. Regarding claim 14, a peak of the transition prism 36 merges with a valley between the main prisms 34 (see Figure 7), but *Leadford* does not specify that this be

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achieved with the use of a cutting tool. Again, the use of cutting tools to form prism in reflectors is well known in the art and is specifically disclosed in Sales (see paragraphs [0070]-[0072]). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a cutting tool to form the prisms 34 and 36 in the shaped wall in Leadford in order to precisely form the peaks and valleys to achieve the desired refractive effect.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN P. GRAMLING whose telephone number is (571)272-9082. The examiner can normally be reached on MONDAY-FRIDAY 7:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sean P Gramling
Examiner
Art Unit 2875

/SPG/
/Sharon E. Payne/
Primary Examiner, Art Unit 2875